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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	09/846,061
Filing Date	04/30/2001
First Named Inventor	Victor Demjanenko
Art Unit	2637
Examiner Name	Lugo, David B.
Attorney Docket Number	

**ENCLOSURES (Check all that apply)**

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input type="checkbox"/> Other Enclosure(s) (please identify below):
<b>Remarks</b>		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	VoCAL Technologies, Ltd		
Signature			
Printed name	Victor Demjanenko		
Date	September 28, 2004	Reg. No.	

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Victor Demjanenko	Date	September 28, 2004

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Victor Demjanenko, et al

Title: Use of Turbo-Like Codes for QAM Modulation Using Independent I and Q Decoding Techniques and Applications to xDSL Systems

Application No.: 09/846,061

Filing Date: 04/30/2001

Examiner: Lugo, David B.

Art Unit: 2637

**RESPONSE TO RESTRICTION REQUIREMENT**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Applicants hereby reply to the office action mailed on September 23, 2004.

## RESPONSE

1. The 23 September 2004 official action addressed claims 1 to 9. Restriction to either Claims 1-7 or Claims 8 and 9 was requested. Claims 1 and 7 are independent. Claims 2-6 are dependent on Claim 1. Claims 8 and 9 are dependent on Claim 7. We will assume the restriction was intended to be for either Claims 1-6 (purportedly Invention I) or Claims 7-9 (purportedly Invention II).

2. Invention I and II are related and would not have separate utility. A QAM DSL system is comprised of a transmitter and a receiver. Forward error correction features must be equally supported in both the transmitter and receiver. Not only is it ineffective to forward error correct a data stream being transmitted to a receiver which is lacking the implementation of a matching forward error correction procedure, but it can be nearly impossible to recover the intended data stream. More extreme disastrous effects arise when a receiver expecting forward error correction is used with a transmitter lacking this feature. Subclass 265 is for a "Trellis Encoder or Trellis Decoder" and is under the more general Subclass 261 for "Quadrature Amplitude Modulation" which itself is under the more general Subclass 259 "Systems using Alternating or Pulsating Current". Inventions I and II are part of a system and should be considered under Subclass 261.

3. In the event of failure to convince the patent examiner of this argument, the applicant would elect a restriction to Invention I by canceling Claims 7, 8 and 9 without prejudice and under protest.

Serial No 10/290,662

4. Inventorship related to Inventions I and II is identical.

The examiner is invited to contact the undersigned to resolve any remaining issues.

Respectfully submitted,

9/28/2004

By \_\_\_\_\_

Date

Victor Demjanenko, Ph.D.

VOCAL Technologies, Ltd.

200 John James Audubon Pkwy.

Buffalo, NY 14228

Telephone: 716-688-4675

Facsimile: 716-639-0713